

### **A b s t r a c t**

The invention describes a method of detecting welding process voltage, whereby the welding process voltage between a welding torch (10) and a workpiece (16) is detected and the welding process voltage is calculated in real time taking account of the interference variables of a welding system, in particular an inductance and a resistance.

Use Fig. 1 for abstract.

10 16 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100